— Soil Fertility Note 3 —
Mending Brown Patch in Fescue Lawns

October 1996

NCDA&CS Agronomic Division **Web site: www.ncagr.com/agronomi** **Phone: 919-733-2655**

Serving North Carolina growers since 1940

Cabbage patch, watermelon patch, strawberry patch—these phrases evoke pleasant images of lush, uniform, carefully tended gardens. For homeowners in the piedmont and the mountains of North Carolina, the phrase *brown patch* conjures up an altogether different set of associations, all of which focus on wasted effort, mismanaged resources and, most significantly, unsightly lawns.

Brown patch is a common disease in tall fescue that can occur as soon as the weather becomes hot and humid. As the name suggests, symptoms include small circular patches of brown, lifeless grass. These patches often enlarge and join together, reaching diameters of six feet or more. Newly established lawns may be more severely damaged than established lawns.

Causes of the disease include excessive shade, improper fertilization, frequent watering and improper mowing. The following guidelines should help you avoid these problems.

- Have your soil tested by the NCDA&CS Agronomic Division. Such tests are the only way to determine if pH and phosphorus levels are adequate to optimize fescue's resistance to brown patch. Soil pH determines nutrient availability, while phosphorus is essential for root development. Fescue grows well at a pH of 6, which is generally higher than natural pH levels across the state.

- Do not apply nitrogen fertilizer in the late spring or during the summer. Excessive nitrogen levels increase fescue's susceptibility to brown patch. In early spring, broadcast a minimum maintenance level of 1 lb of actual nitrogen per 1000 ft^2. That application can be repeated, if necessary, in September and November. To calculate the pounds of nitrogen in a bag of fertilizer, divide the first number on the bag by 100 and then multiply by the bag's weight. Thus, a 50-lb bag of 10-10-10 fertilizer would contain 5 (0.10 x 50) lb of nitrogen.

- Water to a depth of about six inches no more than once a week. More frequent watering provides an ideal environment for disease.

- Mow only when the grass is dry, being sure to remove no more than one third of the top growth.

- Trim trees to increase sunlight and air circulation.

September and October are the best times to seed or repair fescue lawns. For such repairs to be most effective, however, you should submit soil samples now so that results will be available in plenty of time to plan your remedial strategy.

J. Kent Messick
NCDA&CS Agronomic Division

Questions or comments should be directed to the Soil Testing Section of the NCDA&CS Agronomic Division. Additional information on soil testing, nematode testing and plant/waste/solution analysis is available from the NCDA&CS Agronomic Division.

200 copies of this public document were printed at a cost of $3.84 or $0.02 cents/copy.